



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II

Subject: SITREP #43
Region 2 Hurricane Irma/Hurricane Maria

Edison, NJ
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To: Hurricane Maria SitRep Distribution, EPA

Thru: REOC Regional Incident Coordinator Eric Mosher; REOC Deputy Regional Incident Coordinators, Christopher Jimenez (PR), Shawna Hoppe (REOC), Neil Norrell (USVI)

From: Situation Unit

Date: 10/18/2017

Reporting Period: 1400 HRS 10/17/2017 to 1400 HRS 10/18/2017

Executive Summary

EPA responders, including OSCs, CICs, Safety Officers, CID/NCERT agents, and EPA contractors, are performing post-storm response activities, including assessments at regulated facilities, NPL/Removal sites, drinking water and wastewater facilities, and marine operations. Resource orders have begun for additional personnel for the response.

The Regional Emergency Operations Center (REOC) in Edison NJ remains fully staffed and operational. One Region 2 person is staffing the ESF-10 desk at the FEMA NRCC in Washington D.C. Two OSCs and one CEPD personnel are at the FEMA JFO in San Juan, along with one Assistant PIO from media relations and one Assistant PIO for community involvement. Plans for the assessment of fixed facilities, Superfund sites, and critical infrastructure are in place and are being utilized. The REOC Planning and Operations Sections are developing plans for the assessment of areas of special concern and debris management.

U.S Customs is requiring EPA's ERRS contractor to pay a tax on supplies that have arrived in STT prior to release, despite the fact there is a U.S Customs exemption for supplies for entities supporting the FEMA response effort. Puerto Rico operations and FEMA NRCC Liaison Officer are working to resolve this issue.

Currently there are **166 EPA and 108 contractors** involved in the response. The overall staffing levels are expecting to increase as other MAs are issued by FEMA.

1. Introduction

1.1 Background

Site Number:	Contract Number:
D.O. Number:	Action Memo Date:
Response Authority: Stafford Act	Response Type: Emergency
Response Lead: FEMA	Incident Category: Removal Assessment
NPL Status:	Operable Unit:
Mobilization Date: 9/3/2017	Start Date: 8/31/2017
Demob Date:	Completion Date:
CERCLIS ID:	RCRIS ID:
ERNS No.:	State Notification:

1.1.1 Incident Category

An emergency response is warranted under the Stafford Act for responding to threats associated with Hurricane Irma and Hurricane Maria. The President has made emergency declarations and disaster declarations for Puerto Rico and all of the U.S. Virgin Islands following Hurricanes Irma and Maria. Declarations can be found on FEMA's website at <https://www.fema.gov/disasters/>. EPA is responding under these delegations and authorities.

1.1.2 Site Description and Locations

Puerto Rico is a U.S. Commonwealth consisting of a main island and two smaller islands: Culebra and Vieques. Approximately 3.4 million people live in Puerto Rico with a diversified terrain with a central mountain range, southern dry zones and coastal beaches. With varied natural resources, such as El Yunque National Rain Forest and prized beaches, Puerto Rico receives many tourists each year. There are 78 municipalities throughout Puerto Rico.

The United States Virgin Islands (USVI) consists of three islands; St. Thomas, St. John and St. Croix. The islands receive thousands of tourists annually, particularly on cruise ships through the port in Charlotte Amalie. Topography is consistent with Caribbean islands in that the center areas are elevated peaks that slope to flat coastal areas. The Virgin Islands are surrounded by sandy beaches and coral reefs. Eighty percent of St. John is a National Park, and Buck Island off of St. Croix is a National Underwater Reef.

1.1.3 Description of Threat

Threats include the release of chemicals and petroleum products as a direct result of high winds and flooding. Damage to facilities located within impacted areas have the potential to transport containers, chemical waste, and process equipment that contain hazardous materials. High winds have the potential to collapse chemical and oil storage tanks and damage on-shore chemical facilities. Water and wind damage to commercial and residential buildings can generate large amounts of household hazardous waste (HHW) which poses a threat to public health and the environment. Because of the insular geography of the impacted areas there is an additional threat of releases of chemicals and petroleum products into sensitive shoreline areas, including Green Turtle breeding grounds, mangrove swamps, and coral reefs. In the aftermath of Hurricanes Irma and Maria, the entire power grid on Puerto Rico was put out of commission, and drinking water/wastewater-treatment facilities on Puerto Rico and the Virgin Islands have been severely impacted.

1.2 Incident Objectives

Region 2 - Hurricanes Maria Incident Objectives

1. The health and safety of our responders is our highest priority. Develop health and safety messages daily for all field operations;
2. Ensure health and safety of the public by conducting environmental assessments and operating in accordance with approved site safety plans;
3. Coordinate deployments and field activities with community involvement coordinator and Assistant Safety Officers;
4. Continue coordination with OSC deployed to the NRCC in Washington DC on logistics and FEMA Mission Assignments;
5. Continue coordination with OSCs deployed at the FEMA Interim Operating Facility in San Juan, PR
6. Continue coordination with OSCs deployed to the EOCs on St. Croix and St. Thomas;
7. Coordinate and prioritize the assessment of Hazardous Material and Oil Response sites in Puerto Rico and USVI;
8. Coordinate with CEPD, prioritize and perform drinking water and waste water assessment targets in Puerto Rico and the USVI;
9. Coordinate, prioritize and perform fixed facility assessments of RMP, FRP and SPCC facilities in Puerto Rico and the USVI;
10. Perform preparation activities for upcoming field deployment of clean-up resources for abandoned containers, household hazardous waste, hazardous debris and hazardous material staging areas in Puerto Rico and USVI;
11. Continue consolidating ERRS equipment for FEMA transport to Puerto Rico;
12. Coordinate all field activities with CEPD program office staff and FEMA division coordinators. Support CEPD operations that are within the scope of the FEMA Mission Assignments;
13. Coordinate with U.S. Army Corps of Engineers (USACE) in support of the collection of household hazard waste in the USVI;
14. Support USCG sunken vessel recovery operations and coordinate operations with ESF10 partner USCG;
15. Continue drinking water sampling and facility assessments as coordinated and prioritized with DPRN in the USVI;
16. Develop and implement a full staffing plan to increase the response effort to meet the FEMA mission assignments and then for continuous operation in Puerto Rico, USVI and the REOC.

Region 2 – Hurricanes Maria Management Objectives

- Protect the health and safety of EPA employees during re-deployment to VI and PR in the aftermath of Hurricane Maria.
- Implement a re-position plan to address communications schedules, employee location information, rallying points, and a cellular and satellite communication plan.
- Coordinate with FEMA on the re-position and remobilization of EPA responders.
- Implement a re-mobilization plan.
- Minimize social, political, and economic adverse impacts.
- Maintain communication and briefing schedule with R2 senior executives and EPA Headquarters.
- Support a consistent communications approach agency-wide, enabling EPA to act and speak in unison during these incidents.
- Provide situation reports and other information on schedule provided by RIC.
- Provide guidance for length of work day and deployments as it pertains to this specific event.
- Identify clearly defined roles for both Regions and Headquarters.
- Identify long-term recovery objectives the Agency may be requested to support, and determine resources needed to support/sustain those requests to accomplish the objectives.
- Secure NPL and removal sites. Regulated facilities and Superfund and oil sites will be surveyed post storm fall.
- Identify vulnerabilities at regulated facilities.
- Address any immediate hazardous substance releases or oil spills resulting from the storm's impact.
- Assist state and local agencies in ensuring safety of drinking water systems.
- Monitor air quality when/if necessary in response to conditions on the ground.
- Coordinate logistics for deployed personnel to provide transportation, lodging, food & water, security, and ground transportation in the impacted areas.
- Coordinate national resources to assist the Region.
- The response will use the Region's incident specific Data Management Plan (DMP).
- In collecting, sharing, and analyzing environmental data, EPA will give primacy to data with potential human health consequences.
- EPA will work to ensure that its decision-makers have access to the data and expertise they need to make decisions based on sound science.

1.3 Critical Resource Needs

PR

Commercial air traffic to PR remains limited but is improving; however, several flights have been delayed for several hours, causing some logistical problems in San Juan. In addition, hotel accommodations are limited, sometimes necessitating double rooming.

The unavailability of equipment or transportation capacity to date has seriously impacted and delayed EPA's efforts to perform the hazardous waste and debris cleanup components of the FEMA mission assignments. There have been significant difficulties in scheduling barge space to transport equipment from

CONUS. The EPA and the ERRS contractor are working through FEMA at the NRCC to secure space on the transport barges.

Electric utilities are intermittent, but improving in the most populous areas throughout the Commonwealth. Fuel to run generators is scarce in some areas. Additional generators are needed to support critical infrastructure.

Cellular communications and internet connectivity remain intermittent in most areas of PR, making communication with the field teams difficult. Some improvement has been observed, especially in the most populous areas. However, in the West Branch and the South Branch, communications are poor at best. There is a critical need to improve service for internet and cell phone communications. The R2 REOC is coordinating the deployment of satellite sleds to each of the three branches. It is expected that the buildup of FEMA operations in these areas will precipitate cell tower repairs.

Dangerous driving conditions are evident in many of the mountainous areas of PR due to the excessive rain and denuded hillsides. Health and Safety identified USGS data has collected satellite imagery that locates many of the recent mudslides. This data has been added to the EPA Viewer.

VI

Commercial air traffic to the USVI remains limited. This is making transport of personnel and equipment needed to support the missions assigned and requested of EPA difficult.

Fuel to run generators is becoming scarce and additional generators are needed to support critical infrastructure.

Cellular communications and internet connectivity on all islands remains intermittent, making communication with the field teams difficult.

Driving conditions remain hazardous due to downed power poles/lines and power outages causing a lack of traffic signals making travel around the islands difficult and timely.

U.S Customs is requiring EPA's ERRS contractor to pay a tax on supplies that have arrived in STT prior to release, despite the fact there is a U.S Customs exemption for supplies for entities supporting the FEMA response effort.

1.4 Strategic Considerations

Operational tactics are managed through the Operation Section of the response. Strategic considerations that may be used for decision-making include: adverse weather conditions, damage to infrastructure including airports, hotels, blocked/damaged roads, receipt of Mission Assignments, requests for assistance on the local level, integration with ESF-10 partners, logistical concerns, available transportation of assets, resources, and management objectives.

2. Current Activities

2.1 Operations Section

REGION 2 REGIONAL EMERGENCY OPERATIONS CENTER (REOC)

The RICT remains fully engaged in the response with senior meetings and briefings conducted daily. The DRIC continues to develop mobilization and staffing plans to support upcoming operations in support of FEMA Mission Assignments for Operational Support, Assessment Direct Federal Assistance Cleanup and Drinking Water/Waste Water assessment and support in Puerto Rico.

Resource orders have been entered into the WebEOC Personnel Resource Log for a mobilization of additional personnel. Field operation continue to staff up to a full operation status. As above, resources such as lodging/berthing and air transportation are limiting factors.

PUERTO RICO

All PR Branches

The Puerto Rico Department of State (PRDOS) is planning on integrating personnel into the non-PRASA assessment teams. The PRDOS team mission is to document conditions in the communities served by non-PRASA wells where EPA teams are conducting assessments, and to initiate distribution of water and food rations. The PRDOS teams will report needs of the community directly to FEMA at the JFO in San Juan. This mission is being coordinated in the JFO in San Juan and has not yet been implemented.

North Branch

On 10/17/17, heavy rain curtailed field operations to some degree. During the limited time weather conditions were favorable, the Hazardous Debris Assessment Teams were able to establish a new HW staging/collection area at the Mausoleum Debris Pile in Toa Baja. Fixed Facilities assessments were conducted at one site in Toa Alta. CEPD support continued with assessments at non-PRASA drinking water and wastewater facilities.

At the Dorado Groundwater Superfund Site, PRASA has stationed a private security firm at wells 2, 4, 5 & 6 to prevent access by the local community. As before, the USACE is providing two water trucks for distribution to the community, and FBI dropped off pallets of bottled water at well 4. Public water service to the homes is beginning to improve in Dorado.

EPA continued to assist US Coast Guard with abandoned vessel identification.

South Branch

On 10/17/17, the Branch Director and the South Team was strategizing and researching priority Non-PRASA drinking water locations to avoid potential overlap of efforts with DOH. The field teams shifted focus to Non-PRASA facilities in Penuelas. The Hazardous Debris Assessment Team is assessing locations in Humacao, Yabacoa and Maunabo. Fixed Facility assessments were conducted at sites Guayama.

The South Branch is coordinating with FEMA at their Branch 4 complex in Ponce to set up an ESF 10 area in the ICP. The facility is still under development and not all services are ready. The local address is 2050 Ponce Bypass Ste 225, Ponce, Puerto Rico.

West Branch

On 10/17/17, the West Branch began coordination with USACE on Debris Management staging area locations. The Hazardous Debris Assessment Team conducted a meeting with USACE, PREMA, and local officials in Aguadilla to develop a strategy to collect HHW at the authorized dump locations in Aguadilla. Fixed Facilities team performed three assessments in Manati.

The EPA Branch Director and CIC met with FEMA Western Branch director and their operations chiefs at their daily operations meeting, and confirmed with FEMA that EPA staff can access fuel, water and MRES upon displaying Federal ID at the National Guard station in Mayaguez.

Dangerous driving conditions continue due to the heavy rainfall. Closed roads may limit future assessments. The ASO recommends that any travel in the mountainous areas be conducted early in the day due to afternoon rain and thunderstorms.

Vieques Island Update

An assessment team is scheduled to visit the island early next week to collect data on the status of the drinking water and waste water systems on the Island.

Incident Command

The Puerto Rico Incident Commander is coordinating with the CEPD Water Inspectors, remedial and RCRA staff on site and facility assessments. The IC coordinated with EPA/CID for security support. A PIO Coordinator is supporting Incident Command. The IC is coordinating with the USCG for Marine Operations and hazardous material response related to sunken vessel recovery.

EPA continues to coordinate with the USACE in support of EPA's hazardous materials removal operations Mission Assignment. USACE is currently completing the permit process for several locations for debris collection staging areas. EPA plans to co-locate hazardous material staging areas at all identified staging locations. Until USACE's areas are identified, EPA is coordinating with EQB to establish a temporary hazardous materials staging area. EPA is conducting Site visits with USACE and EQB at the proposed USACE staging areas, as well municipal collection areas.

Quick response teams consisting of OSCs, CEPD, CID, and RST contractors are prepared to investigate reports of hazardous chemical releases and any other relevant incidents.

NPL Site Assessments

EPA personnel continue to conduct preliminary assessments at Superfund or Oil Response Sites in Puerto Rico and evaluate the potential for contamination to cause off-site impacts as a result of Hurricane Maria. The REOC continues to follow up with the RPMs for each site.

Hazardous Debris Assessment

EPA is adding a Hazardous Debris Assessment Team to each of the three field branches to coordinate with CEPD and USACE. These teams have a list of the landfills and other locations identified by CEPD that are being considered for temporary hazardous debris staging pads. The teams will also document areas where residents have begun to accumulate hazardous debris, such as roadside dumping locations for pick up and transportation to approved staging pads. The coordinator for Hazardous Debris Assessment is Carlos Huertas, who will be located in San Juan.

FEMA JFO/PR

EPA continued coordination with FEMA, USACE, USCG and the Commonwealth of PR in regards to field operations, assessment of fixed facilities, drinking water infrastructure and data transfer. The coordination and communication with federal partners has been vital. EPA is expanding its drinking water and waste water assessment missions to partner with teams from the Puerto Rico Department of State (PRDOS). Coordinated field work with the PRDOS and CEPD is expected to begin on 10/17/17.

R2 DRIC-PR

We are awaiting analytical results from the drinking water samples collected on 10/14/17 at the Dorado Groundwater Superfund Site.

The RIC and DRIC-PR have been actively coordinating with the Environmental Unit, PRDOH and PRASA regarding the analytical laboratory services available in Puerto Rico. Two DESA personnel are in PR and are conducting follow up visits at PRDOH and PRASA facilities to assess their operating status and analytical services. Additionally, DESA is conducting assessments at commercial laboratories to document their operational status. A report and spreadsheet are being developed to report their findings. There is a FEMA Mission Assignment in place to assist with funding the PRASA and PRDOH labs with needed repairs, equipment and personnel to come back into service.

The DRIC-PR is developing a communication strategy to improve coordination with the JFO, EPA R2 and CEPD to be implemented over the next few operational periods.

The EPA Emergency and Rapid Response Services (ERRS) contractor is planning to ship necessary equipment to support the debris MAs, using a FEMA transport. Equipment is on route to the Virgin Islands; transport to Puerto Rico is expected to disembark from Charleston, SC at mid-week. A staging area at the US Army Garrison - Ft. Buchanan, in Guaynabo, has been secured for the eventual staging of this equipment. This location will be used to stage equipment and will not be a hazardous materials/waste staging area. Additional personnel, both EPA and contractors, continue to mobilize to Puerto Rico.

EPA Criminal Investigation Division

CID has re-assessed their PR staffing plan and with concurrence from the RIC, all out-of-region CID agents will be demobilizing from Puerto Rico over the next few days. CID will maintain their normal compliment of two agents on PR. These agents will be available for security details on request of the IC. Additional agents will be mobilized to PR on an as-needed basis.

Debris Management

EPA is adding a Hazardous Debris Assessment Team to each of the three field branches to coordinate with CEPD and USACE. These teams have a list of the landfills and other locations identified by CEPD that are being considered for temporary hazardous debris staging pads. The teams will also document areas where

residents have begun to accumulate hazardous debris, such as roadside dumping locations for pick up and transportation to approved staging pads. The coordinator for Hazardous Debris Assessment is Carlos Huertas, who will be located in San Juan.

USCG Marine Operations in Puerto Rico

USCG/EPA coordination is taking place through USCG IC and EPA OSC. Marine teams conducted assessments along the coast, including the Island of Culebra. Any waste (such as oiled sorbent boom) generated during vessel ops is being managed through the USCG Oil Spill Response Organization (OSRO) already under contract for Puerto Rico. USCG has tentatively identified 266 sunken vessels as initial targets for assessment. Data is reported on the EPA Viewer.

U.S. VIRGIN ISLANDS

STX:

EPA continues to attend the Debris Management Task Force meetings regarding debris management and curtain burn operations. Pending official Territorial approval, debris and burn operations remain on hold.

Facility assessments on STX have been completed.

EPA continues to coordinate with the USCG on supporting vessel recovery operations.

EPA ERRS contractor procured a method for shipping of materials and equipment to the USVI. The materials and equipment were shipped via barge from Fort Lauderdale, Florida and arrived Wednesday, October 18, 2017 on STX. EPA is working with FEMA and CBP to have the materials released to ERRS.

STT/STJ:

The STT/SJT IC spends portions of each day at the Virgin Island Territorial Emergency Management Agency (VITEMA) office and at the United States Coast Guard (USCG) Incident Command Post (ICP) that supports Boat Recovery Operations. The VITEMA office serves as the EOC for the federal and territorial Emergency Support Functions (ESF). Daily ESF briefings are at 0730 and cover operations occurring for that day. The EPA Field Office in STT will soon support the IC, CICs, and logistics for mob/demob of response staff supporting EPA response activities.

The USCG ICP serves USCG, EPA, Response Support Team (RST), and ERRS, and an office has been provided for the USVI DPNR.

Sampling and assessment teams continue to meet daily at the Oceans Systems Laboratory for a daily briefing and work with laboratory staff and DPNR to identify sampling locations.

EPA continues the assessment of EPA regulated facilities.

EPA continues to coordinate with the USCG on supporting vessel recovery operations.

EPA ERRS contractor procured a method for shipping of materials and equipment to the USVI. The materials and equipment were shipped via barge from Fort Lauderdale, Florida. Three containers arrived on STT on 10/15/17. EPA is working with FEMA and CBP to have the materials released to ERRS.

Debris Management:

EPA has been requested to assist with the handling and disposal of HHW, medical waste and e-waste. EPA will also assist with the preparation of white goods for recycling by VIWMA.

At the recent Power and Debris Coordination "decision making" meeting, the team met a major milestone by receiving a final selection for sites for the collection of HHW and white goods. The proposed location for HHW collection is at the Evelyn Williams Elementary School, which is a former school no longer in use and owned by the VIDEOE. White goods will be staged at the USACE debris staging location at Body Slob. A memo was sent to the DPNR commissioner requesting approval/permit for an HHW staging area for STX at the former school location. EPA is waiting for approval from DPNR before we can begin operations at the staging area.

EPA personnel continue working with the territory for packaging, transportation and disposal of stockpiled medical waste at the hospitals on STX (approx. 50,000 lbs) and on STT (approx. 80,000 lbs). The contract for packaging, transportation and disposal of medical waste is anticipated to be awarded this week.

USACE has requested EPA assistance with air monitoring during the USACE's air curtain burning of vegetative debris activities should the burn take place. USACE intends to segregate construction and demolition (C&D) debris prior to burn operations. The C&D debris will be handled by VIWMA. EPA was informed burn activities will happen on all three islands, pending official Territorial approval.

USCG Marine Operations in USVI

Data Management

EPA RST continued inputting the vessel assessment info into Response Manager.

Outreach and Communications

DPNR is compiling a list of owners of the distressed vessels based upon their initial assessments. Owners will be notified by phone, by certified letter and by public service announcements that their vessel needs to be removed. USCG has provided administrative personnel to assist with these notifications.

The USVI PIO is finalizing a public service announcement which should be issued this week sometime advising owners of sunken or grounded boats that they need to remove them by the deadline or the USCG will remove them.

The hard date of November 10th after which all distressed vessels will be removed has been changed to December 1.

Response Actions and Issues

USCG will contract either National Response Corp (NRS) and/or Resolve Maritime to remove fuels, batteries and gray/black water from vessels.

EPA will be handling all materials once they are brought to shore for disposal. EPA will remove HHW from the vessels once they are in the staging area.

2.2 Planning Section

2.2.1. Resources

Personnel	EPA Edison, NJ NYC	FEMA NRCC, DC	San Juan, Puerto Rico*	Mayaguez, Puerto Rico	Ponce, Puerto Rico	St. Croix USVI*	St. Thomas/ St. John USVI*	Totals
EPA	73	1	24	12	12	10	9	141
CEPD (EPA)	0	0	22	0	2	0	1	25
START/ RST	15	0	18	7	8	5	13	66
ERRS	8	0	6	0	0	12	15	42
Totals	96	1	70	19	22	28	38	274

*Number includes personnel working at JFO, EOC, CEPD field inspectors.

Please refer to the Personnel On-Site section four for further information regarding personnel.

2.2.2 Environmental Unit:

The EU/DESA continues to track the status of certified drinking water labs on PR and VI. Changes to the tracking sheet were made based on information delivered to the EU.

PRDOH has requested EPA support to assist in bringing microbiological and chemical methods back online. The EU will be assisting OPs with this request.

The EU has received the preliminary results for the water quality parameter analysis of the Dorado GW samples. Validated results are expected Thursday. The EU has also received the validated results for microbiological and sanitary parameter analysis from Beckton Labs.

The "Air Monitoring at Response HW Collection Pad Sampling" QAPP has been finalized. The EU continues to prepare and track progress on the development and approval of QAPPs for the sampling or monitoring.

QAPPs in progress are:

- PWS DW Sampling QAPP – Final 9/28/17
- Addendum 1 for Chemical Analysis – Final 10/14/17
- Vegetative Debris Burn – Final 10/10/17
- Response HW Collection Pad Soil Sampling – Final 10/16/17
- Air Monitoring at Response HW Collection Pad Sampling – Final 10/18/17
- Supplemental DW Sampling & Analysis QAPP - On hold for input from CWD and CEPD
- Construction and Demolition Debris Burn – On hold
- Waste Water Effluent Sampling – On hold

2.2.3 Documentation Unit

No update during this report period.

2.2.4 GIS and Data

The Data Unit processed field data collected yesterday and updated reporting tables for the management report. Data continued processing Survey 123 forms in EPA Geoplatform. Data viewer was updated with information from 10/17. Data is working with field ops on drinking water and HHW data collection. Data is reviewing, updating, and formatting drinking water data to provide FEMA with requested data deliverables. Data also provided viewer overview for personnel at morning 0800 briefing.

2.3 Logistics Section

Logistics is coordinating with Contracting Officer and Lodging Unit Leader to address lodging needs in Puerto Rico. ERRS has ordered 30 GPS units for use in the response. In addition Purchase Orders are in the works to secure 9 MultiRAE's for the response. Over 20 boxes of various PPE has been shipped to PR. Logistics is coordinating delivery of Sat Phones and Radios to the west operation in PR.

2.4 Finance Section

As of 10/18 EPA has a total of 11 active MAs issued by FEMA. These MAs are to maintain REOC operations, conduct assessments in the impacted areas of PR and VI, and initiate limited hazmat recovery in the VI. In response to the devastating impact of Hurricane Maria on PR and the VI, the ESF10 desk continues to interact with FEMA for additional Mission Assignments for RRCC/JFO/EPA EOC, staffing and assessments, and environmental assessments for both VI and PR.

FEMA MAs are detailed in the daily Management Report and display the purpose of the MAs, total funding, and burn rates.

2.5 Other Command Staff

2.5.1 Safety Officer

The Safety Officers are Greg DeAngelis who can be reached at 908-402-4473 (cell) and Brian Kovak who can be reached at 908-202-9848 (cell).

Coordination continues with the National FOH coordinator concerning possible ways to provide vaccinations for CEPD responders in Puerto Rico as required. Coordinations was also made with members of the NRT and CDC concerning possible venues to get vaccinations in Puerto Rico as well. Continued to coordinate

with Region 2 SHEM concerning training and medical monitoring status of CEPD responders. Continued to coordinate with the EPA HQ Workers Compensation Coordinator to establishing procedures to acquire hard copy CA16, CA1 & CA2 forms when the electronic system is not available. Safety continued to prepare for the ICS404 (Safety Officer) course which will be given in Region 2. Safety consolidated the information from the 214 Form information from ASOs. There were no reported EPA/EPA Contractor occupational illness and no injuries.

SITREP Safety Message: It is incumbent on everyone and not only the supervisors and safety personnel to look out for the health and welfare of your co-workers. Do they look exhausted? Are they drinking water often and being hydrated? Do they seem like they are getting enough sleep? Ask questions! If you are concerned about a co-worker...let the supervisor or safety personnel know before it is too late!

2.5.2 Liaison Officer

The LNO followed up with CBP on the status of the ERRS equipment that is being held up in the USVI. CBP informed the LNO that the equipment is not being held up by Customs. The issue is with the VI government's Excise Office, which is requesting the payment of an excise tax on the shipment. The EPA IC on STX is working with FEMA's Legal Counsel to address the issue.

The LNO worked with FEMA logistics and the MCC to identify the location and local point of contact for the transport of ERRS equipment to Charleston, SC, for loading on a barge scheduled to depart this weekend for Puerto Rico.

As of 10/18, the FEMA NRCC has shifted to a modified "enhanced watch," and approximately half of the ESF's and FEMA NRCC personnel have been deactivated. However, ESF #10, along with a handful of other ESFs, remain at the NRCC to continue remaining coordination efforts that can best be accomplished at the NRCC. EPA intends to discontinue NRCC staffing at the end of this week.

FEMA has requested EPA participation in efforts to address long-term infrastructure restoration efforts in PR and VI. The LNO has forwarded those requests to the REOC, to identify the most appropriate regional personnel to participate in those planning efforts, particularly for drinking water and waste water system issues.

2.5.3 Information Officer:

The PIO is Rusty Harris-Bishop, who can be reached at 415-694-8840. The Assistant PIO for Media Relations is Darrin Larson who can be reached at 972-467-5509 and the Assistant PIO for Community Relations is Cecilia Echols, who can be reached at 917-698-0107.

Elias Rodriguez is serving as the Field PIO in San Juan and is working the EPA desk at the Sheraton Convention Center with FEMA.

A Maria update news release was issued on October 18, 2017 highlighting the Region 2 Administrator's visit to Puerto Rico. He will be travelling to St. Croix and St. Thomas tomorrow to meet with Governor Mapp and representative of the USVI government, as well as EPA teams in the field. We continue to provide all Region 2 staff with relevant Maria news clips and EPA news releases.

The EPA Hurricane Maria web site at www.epa.gov/hurricane-maria is being managed by Region 2 and the HQ EOC.

Media Inquiries:

Reporters should email their inquiries to press@epa.gov

Community Involvement:

There are currently three CIC's in San Juan, three CIC's in Mayaguez, three CIC's are in Ponce and three CIC's in the USVI. Silvia Paloma will be the JFO, while the remaining CIC's will be working with field assessment teams on outreach.

The PIO and PAD management are continuing to identify PIOs, bi-lingual Community Involvement Coordinators and community relations support for the USVI and Puerto Rico assessment and cleanup teams. Bi-lingual Community Involvement Coordinators (CICs) are assisting the assessment teams in Puerto Rico. To guide our outreach efforts in Puerto Rico and the USVI, a Hurricane Maria Community Outreach Plan has been developed.

Members of the public should be directed to EPA's toll free hotline 1-888-283-7626. This line will now be staffed during regular business hours (Eastern).

2.5.4 Drinking Water and Water Treatment

Puerto Rico Drinking Water Status PRASA:

- 27 of the 115 drinking water treatment plants (WTPs) operated by PRASA are out of service.
- 88 WTPs are working on alternate power or primary power.
- 34.6% of the population are without drinking water services.
- The plants that are out of services are because lack of primary power, lack of diesel, operational problems or clogged intakes.
- The DOD has installed Reverse Osmosis drinking water plants in the municipalities of Añasco, Comerio, Lares and Maricao since the PRASA drinking water facilities in these municipalities have major problems with their drinking water intakes and it will take PRASA some time to get their facilities in service.
- List of Plants out of service:

1. Barrancas (0.55 MGD) - Raw water intake out of service.
2. Las Bocas (1.0 MGD) – Alternate Power Unit out of service.
3. Cayey Urbano (3.5 MGD) – Raw water intake out of service.

4. Culebras Alto (0.33 MGD) - Alternate Power Unit out of service.
5. Maizales (0.5 MGD) – Alternate Power Unit out of service.
6. Guayabota (0.3 MGD) - Alternate Power Unit of raw water intake out of service.
7. Guzman Arriba (1.0 MGD) – Raw water intake pipe broken.
8. Arecibo Urbano (1.5 MGD) - Alternate Power Unit out of service.
9. Esperanza (0.5 MGD) - Alternate Power Unit out of service.
10. Rio Arriba (0.25 MGD) - Raw Water Intake collapsed.
11. Quebrada (2.0 MGD) – Raw Water Pump Station out of service.
12. Canalizo (0.14 MGD) – Alternate Power Unit out of service.
13. Mameyes Arriba (0.43 MGD) –Alternate Power Unit out of service.
14. Indiera Alta (0.5 MGD) - Raw water pump station flooded.
15. Mameyes Abajo (0.22) - Raw water pump station Alternate Power Unit out of service.
16. Santa Isabel (1.0 MGD) - Raw water pump station Alternate Power Unit out of service.
17. Utuado Urbano (3.5 MGD) - Raw water pump station Alternate Power Unit out of service.
18. Fronton (0.25 MGD) - Alternate Power Unit out of service.
19. Morovis Sur (4.0 MGD) – Raw water intake clogged, contractor is cleaning the intake.
20. Sanamuerto (0.5 MGD) - Alternate power unit out of service.
21. Negros (2.5 MGD) – Raw water pump station flooded.
22. Guajataca (2.0 MGD) - Raw Water Supply clogged, being cleaned by DOD. This should be resolved next week.
23. Maricao (0.75 MGD) - Alternate power unit out of service.
24. Sabana Grande (0.75 MGD) – Raw water intake clogged.
25. Coamo Urbano (1.05 MGD) – Collapsed raw water intake.
26. Aceituna (2.5 MGD) - Collapsed raw water intake.
27. Apeadero (0.25 MGD) - Collapsed raw water intake.

Non-PRASA Water Treatment Systems:

Currently working with FEMA, USACE, EPA, and DOH to coordinate federal support to Non-PRASA drinking water facilities. In Puerto Rico, there are 297 independent private and community water treatment systems that serve approximately 4% of the population. Details of proposed visit schedule for EPA and DOH Assessment Teams were sent to EPA Region 2 Puerto Rico Incident Coordinator.

EPA is working with PRDOH and DOD, HHS and FEMA, in assessing the non-PRASA drinking water systems throughout PR. Such systems provide drinking water from wells and surface water to isolated communities located in rural areas in PR. Deployed teams assess drinking water quality, assess the condition of the systems, and identify other immediate needs (i.e., food, shelter, medical support, etc.). Identified needs are referred to FEMA/PREMA.

Puerto Rico Wastewater Status:

- 9 of the 51 wastewater treatment plants (WWTPs) operated by PRASA are out of service.
- 8 WWTPs are working on primary power.
- Most of the WWTPs that are out of service are not receiving any sewage due to collapsed trunk sewers or main pump stations with operational problems.
- Of the 9 WWTPs out of service, 5 are located upstream of a drinking water intake. These facilities are:
 1. Comerio (1.0 MGD) – Main trunk sewer collapsed, no sewage reaching the plant.
 2. Utuado (2.0 MGD) - Main trunk sewer collapsed, no sewage reaching the plant.
 3. Ciales (1.5 MGD) – Main trunk sewer collapsed, no sewage reaching the plant. A contractor is on-site.
 4. Corozal (1.25 MGD) - Main trunk sewer collapsed, no sewage reaching the plant. PRASA already has a contractor on site. It may take two weeks for repairs.
 5. Maricao (0.25 MGD) - Main trunk sewer collapsed, no sewage reaching the plant.
- The remaining 8 WWTPs out of service are:
 1. Culebra (0.2 MGD) – Influent pump station out of service.
 2. Fajardo (9.2 MGD) – Alternate Power Unit out of service.
 3. Yabucoa (1.5 MGD) - Alternate Power Unit out of service.
 4. Toa Alta (0.8 MGD) – Plant was flooded, major equipment damages.
- The Dorado (4.05 MGD) facility which suffered major equipment damages since it was completely flooded by the La Plata river was put back in service on alternate power and providing partial treatment.
- The main trunk sewer that was collapsed of the Cayey (4.0 MGD) and San Sebastian Old (0.5 MGD) facilities, were repaired over the weekend.
- The San Sebastian New (1.0 MGD) facility which suffered major equipment damages since it was completely flooded by the Culebrinas river, was put in service yesterday.
- PRASA owns close to 800 sanitary pump stations.
- Today, at least 286 sanitary pump stations are overflowing sewage due to lack of power, malfunctioning power generator or pumping problems.
- Of these 292 pump stations, 104 are located upstream of a water supply intake.
- The biggest concern is the Torrecillas Pump Station, which is tributary to the Carolina WWTP and is the largest pump station in the island. The station, which currently pumps around 25 MGD suffered major damages due to flooding. PREPA was energizing the area to get the pump station back in service.

USVI Drinking Water Status

VIWAPA is reporting:

- o While water service remains available throughout Cruz Bay, St. John, there are two days of emergency water storage on the island.
- o There are six days of emergency water storage on St. Thomas. The Water Division continues to work with electrical crews to re-energize additional pump stations. The water division is working with FEMA and WAPA electric crews to restore service to two pump stations which are currently off line. The pump stations, once restored would allow a resumption of potable water to Savan and Contant Knolls communities.
- o On St. Croix, there are four days of emergency water storage. WAPA is pumping at full capacity at Contentment, Mount Welcome and Concordia pump stations. This has facilitated water service to mid-island and Frederiksted town.

Field Reports

STX:

- Drinking water sampling continued in coordination with DPNR. DPNR identified a total of 181 drinking water systems for EPA assistance with sampling. EPA continues to collect samples from these systems.
- Samples collected are taken to the Ocean Systems Lab on STX for microbial analysis.
- EPA continues assisting DPNR with notifying the owner/operators of the systems sampled with the results of the samples.
- EPA presented DPNR with a draft decision-making matrix for review on Monday, October 16, 2017. This matrix will help guide EPA's water sampling assistance to the department and define end points for this assistance. EPA is awaiting DPNR to provide a date to have a coordination meeting to discuss the drinking water sampling efforts moving forward.

STT/STJ:

- Drinking water sampling activities continue. EPA continues to coordinate drinking water sampling with DPNR. Samples collected are taken to the Ocean Systems Lab on STT for microbial analysis.
- EPA is continuing to coordinate with DPNR to prioritize drinking water facilities to be assessed and sampled.
- DPNR continues to resample facilities which had previously tested positive for the presence of bacteria.
- Staff from the DOH accompanied one EPA sampling team that delivered analytical results to locations that supply potable water to the public that tested positive for total coliform. As a result, the DOH put water restrictions on two commercial properties and hotel.

USVI Wastewater Status

- VIWMA continues assessments of all waste water facilities. Most facilities assessed to date either need a generator to power the facility or fuel for the facility. All critical needs for the facilities have been relayed to the appropriate ESF. No further action has been requested of EPA at this time.

3. Participating Entities

3.1 Unified Command

EPA is staffing the ES-10 desk at the FEMA NRCC in Washington, D.C. EPA remains actively engaged in UC with federal, state, and local partners.

3.2 Cooperating Agencies

United States Coast Guard (USCG)
 Agency for Toxic Substances and Disease Registry (ATSDR)
 Federal Emergency Management Agency (FEMA)
 United States Army Corps of Engineers (USACE)
 Puerto Rico Environmental Quality Board (PREQB)
 Puerto Rico Department of Natural and Environmental Resources (PRDNER)
 Puerto Rico Emergency Management Agency (PREMA)
 Puerto Rico Aqueduct and Sewer Authority (PRASA)
 Puerto Rico Department of Health (PRDOH)
 Virgin Islands Department of Planning and Natural Resources (DPNR)
 Virgin Islands Territorial Emergency Management Agency (VITEMA)
 Virgin Islands Water and Power Authority (VIWAPA)
 Virgin Islands Department of Health (VIDOH)
 Virgin Islands Department of Waste Management (VIDWM)

4. Personnel On Site

Additional EPA personnel and contractors are in the process of being deployed to impacted areas of PR and the VI.

EPA staff continue to participate in the NRCC in Washington, D.C. and also the REOC in Edison, NJ.

For more detailed information, see the Personnel Table in Resources, Section 2.2.1 of the SITREP.

5. Definition of Terms

Assisting and Cooperating Agencies - Agencies who are assisting the EPA response, but are not a part of Unified Command.

E Goods - Electronic machines which contain hazardous components.

Emergency Response - any activity undertaken by the Operations Section which mitigated an immediate threat

to human health or the environment.

ESF – Emergency Support Function. The ESFs provide the structure for coordinating Federal interagency support for a Federal response to an incident. They are mechanisms for grouping functions most frequently used to provide Federal support to States and Federal-to-Federal support, both for declared disasters and emergencies under the Stafford Act and for non-Stafford Act incidents.

FRP - Facility Response Plan. Under the Clean Water Act, as amended by the Oil Pollution Act, a plan for responding, to the maximum extent practicable, to a worst case discharge, and to a substantial threat of such a discharge, of oil. Required by certain facilities that store and use large quantities of oil.

Household Hazardous Waste - Small quantity waste from households that contain corrosive, toxic, ignitable, or reactive ingredients is hazardous. This includes pesticides, paint, solvents, etc.

Hazardous Debris - Debris which contains compounds that make it inappropriate for municipal landfill disposal.

JHA – Job Hazard Analysis.

MA - Mission Assignment.

QAPP - Quality Assurance Project Plan.

PPE - Personal Protective Equipment.

RCRA - Resource Conservation and Recovery Act.

RMP- Risk Management Plan. Under the Clean Air Act, certain facilities with large quantities of toxic potentially air born chemicals whose releases may impact human populations are required to submit to EPA a plan for hazard assessment, prevention, and emergency response.

Small Container - any container with a potential capacity of less than 5 gallons.

SPCC - Spill Prevention, Control and Counter-measure

TRI - Toxic Release Inventory - A publicly available EPA database that contains information on toxic chemical releases and other waste management activities reported annually by certain covered industry groups as well as federal facilities. This inventory was established under the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) and expanded by the Pollution Prevention Act of 1990.

Unified Command - A structure based on the Incident Command System (ICS) that brings together the Incident Commanders of all major organizations involved in the incident in order to coordinate an effective response, while at the same time allowing each to carry out their own jurisdictional, legal, and functional responsibilities.

White Goods - Large home electronics such as refrigerators, washing machines, and dryers.

WW - Wastewater Treatment Facilities

6. Additional sources of information

U.S. EPA: www.epa.gov/hurricane-irma, www.epa.gov/hurricane-maria

FEMA: www.fema.gov/hurricane-irma

VITEMA: www.vitema.gov , <https://www.facebook.com/vitema/>

VIWAPA: www.viwapa.vi/Home.aspx

National Hurricane Center: www.nhc.noaa.gov

Government of USVI: www.vi.gov

Newspaper in USVI: <http://viconsortium.com/>

Government of PR: www.pr.gov

7. Situational Reference Materials

Situational updates from the field and the Command and General Staff members are due to the Situation Unit by 1400 hours daily. Situation Reports are projected to be distributed by 1700 hours daily. In addition, Management Reports are distributed daily.

The REOC has established a dedicated viewer for presenting a Common Operating Picture (COP). The viewer can be accessed by visiting <https://r2.ercloud.org/er/irma/viewer.aspx>. Region 2 OSCs can access the viewer by inputting their TRACE credentials. Those that do not have access can request authorization by clicking on the "Create Account" tab, followed by "Request Access".